

717

U. S. Department of Agriculture - Forest Service
CENTRAL STATES FOREST EXPERIMENT STATION
 Columbus, Ohio

Station Note
 No. 17

December 8, 1934

A BLACK WALNUT VOLUME TABLE
FOR CONTENTS IN CUBIC FEET

Plantation Black Walnut
 (Juglans nigra Linn.)
 Central States Region

B. R. Lexen

1930

Entire stem less bark
 Cubic Feet

Diameter breast high Inches (o.b.) (i.b.)	Total Height in Feet									Basis: No. of Trees
	10	20	30	40	50	60	70	80	90	
	Volume in cubic feet									
1 0.8	.03	.05	.07							14
2 1.6	.10	.18	.26	.34	.42					13
3 2.4	.21	.38	.54	.70	.86	1.02				20
4 3.3	.36	.65	.91	1.19	1.47	1.77	2.0			20
5 4.1	.55	.98	1.39	1.83	2.28	2.70	3.1	3.5		24
6 5.0	.79	1.40	2.00	2.62	3.30	3.96	4.6	5.1		31
7 5.9	1.06	1.89	2.70	3.58	4.50	5.4	6.2	6.9		35
8 6.7		2.42	3.50	4.65	5.80	7.0	8.0	9.0	9.7	35
9 7.6		3.05	4.45	5.90	7.40	8.8	10.1	11.3	12.3	25
10 8.5		3.75	5.50	7.30	9.1	10.9	12.6	14.0	15.5	29
11 9.4			6.55	8.75	11.0	13.3	15.4	17.2	18.8	29
12 10.3			7.8	10.3	13.0	15.9	18.3	20.2	22.0	29
13 11.2			9.1	12.1	15.4	18.7	21.3	24.0	26.0	27
14 12.0			10.4	13.9	17.8	21.1	24.5	27.3	29.6	16
15 12.9			11.9	16.0	20.0	24.2	28.0	31	34	16
16 13.8			13.7	18.3	22.8	27.5	31.5	35	38	13
17 14.7					25.8	30.8	35.5	40	43	10
18 15.6					28.6	34.0	39.5	44	48	6
19 16.5					31.8	38.2	44.2	50	55	4
20 17.3						42	50	55	60	2
21 18.2						46	54	60	65	1
22 19.1						51	60	66	72	1
23 19.9						55	65	72	79	
Basis: No. of Trees	4	26	50	49	64	96	86	24	1	400

Based on trees measured by Central States Forest Experiment Station in Kentucky, Indiana, Illinois and Iowa, under the supervision of L. F. Kellogg. Stump height 1.0 ft. Volume measured by planimeter. Aggregate deviation: chart 0.49% low. Average percentage deviation 5.1%. Block indicates extent of basic data. Prepared by the alinement chart method in the Washington Office.

This is the first of five volume tables for plantation black walnut, prepared from the study of walnut throughout the Central States.